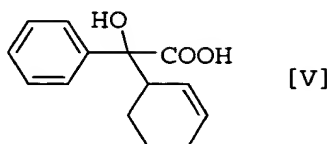
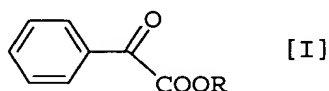


3. A compound of the formula [V]



, an optically active form thereof or a salt thereof.

4. A method for producing a compound of claim 1, which method comprising reacting a compound the formula [I]



wherein R is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl, norbornyl, methoxycarbonyl, ethoxycarbonyl and benzoylcarbonyloxy, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl or an optically active form thereof, with cyclohexene in the presence of a Lewis acid.

5. The production method of claim 4, wherein R and R' are each linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

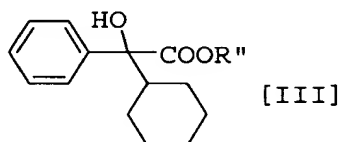
6. The production method of claim 4, wherein R and R' are each a group having an asymmetric carbon atom.

7. The production method of claim 4, wherein the Lewis acid is an optically active Lewis acid having an asymmetric ligand.

8. The production method of claim 4, wherein the Lewis acid is titanium tetrachloride.

9. The production method of claim 4, wherein the reaction is carried out in monochlorobenzene.

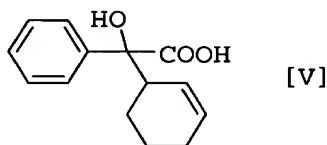
10. A method for producing a compound of the formula [III]



wherein R'' is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl, norbornyl, methoxycarbonyl, ethoxycarbonyl and (α -cyclohexyl- α -hydroxybenzyl)carbonyloxy, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl or an optically active form, which method comprises reducing a compound of claim 1.

11. The production method of claim 10, wherein R' and R'' are each linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

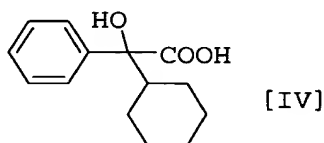
12. A method for producing a compound of the formula [V]



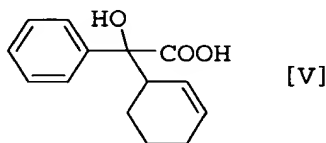
, an optically active form thereof or a salt thereof, which method comprises hydrolyzing a compound of claim 1.

13. The production method of claim 12, wherein R' is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

14. A method for producing 2-cyclohexyl-2-hydroxy-2-phenylacetic acid of the formula [IV]

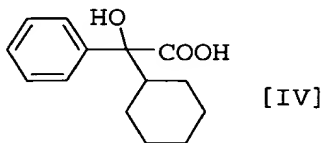


, an optically active form thereof or a salt thereof, which method comprising reducing a compound of the formula [V]



, an optically active form thereof or a salt thereof.

15. A method for producing 2-cyclohexyl-2-hydroxy-2-phenylacetic acid of the formula [IV]



, an optically active form thereof or a salt thereof, which method comprises subjecting a compound of claim 1 to hydrolysis and reduction.

16. The production method of claim 15, wherein R' is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least

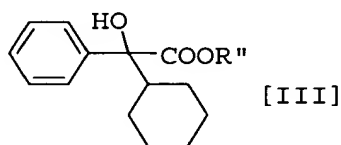
one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

17. The production method of claim 15, which comprises simultaneous hydrolysis and reduction.

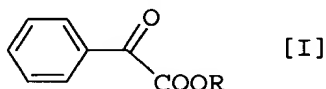
18. The production method of claim 15, which comprises hydrolysis after reduction.

19. The production method of claim 15, which comprises reduction after hydrolysis.

20. A method for producing a compound of the formula [III]



wherein R'' is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl, norbornyl, methoxycarbonyl, ethoxycarbonyl and (α -cyclohexyl- α -hydroxybenzyl)carbonyloxy, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl or an optically active form thereof, which method comprising reacting a compound the formula [I]

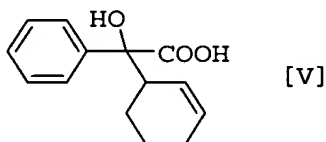


wherein R is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl, norbornyl, methoxycarbonyl, ethoxycarbonyl and benzoylcarbonyloxy, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl or an optically active form thereof, with

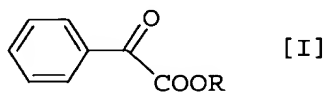
cyclohexene in the presence of a Lewis acid to give a compound of claim 1, and reducing the same.

21. The production method of claim 20, wherein R' and R'' are each linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

22. A method for producing a compound of the formula [V]



, an optically active form thereof or a salt thereof, which method comprises reacting a compound of the formula [I]

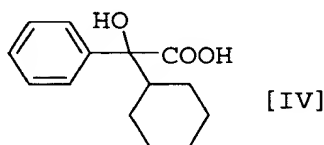


wherein R is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl, norbornyl, methoxycarbonyl, ethoxycarbonyl and benzoylcarbonyloxy, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl or an optically active form thereof, with cyclohexene in the presence of a Lewis acid to give a compound of claim 1 and hydrolyzing the same.

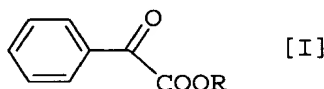
23. The production method of claim 22, wherein R and R' are each linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally

substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

24. A method of producing 2-cyclohexyl-2-hydroxy-2-phenylacetic acid of the formula [IV]



, an optically active form thereof or a salt thereof, which method comprises reacting a compound of the formula [I]



wherein R is linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl, norbornyl, methoxycarbonyl, ethoxycarbonyl and benzoylcarbonyloxy, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl or an optically active form thereof, with cyclohexene in the presence of a Lewis acid to give a compound of claim 1, and subjecting the same to hydrolysis and reduction.

25. The production method of claim 24, wherein R and R' are each linear or branched chain alkyl having 1 to 15 carbon atom(s), which is optionally substituted by at least one substituent selected from the group consisting of phenyl, naphthyl, cyclohexyl, cyclopentyl and norbornyl, or cyclohexyl, cyclopentyl or norbornyl, which is optionally substituted by at least one substituent selected from the group consisting of linear or branched chain alkyl having 1 to 15 carbon atom(s) and phenyl.

26. The production method of claim 24, which comprises simultaneous hydrolysis and reduction.

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